AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (currently amended) A luminance level compensating apparatus comprising:

a first masking device for passing only a luminance signal corresponding to a pixel in a first detection range in the vertical direction of an image which is indicated by an input luminance signal;

a second masking device for passing only a luminance signal corresponding to a pixel in a second detection range in the vertical direction of the image which is indicated by said input luminance signal, wherein the first detection range corresponds to a first predetermined image area and the second detection range corresponds to a second predetermined image area, which is not equal to the first predetermined image area;

a first histogram memory device for detecting and storing a first frequency data for each luminance level of the luminance signal output from said first masking device for each predetermined period;

a second histogram memory device for detecting and storing a second frequency data for each luminance level of the luminance signal output from said second masking device for each predetermined period;

a multiplying device for multiplying the first frequency data stored in said first histogram memory device by a coefficient;

~~a frequency data mixing device for generating mixed frequency data based on each of the first and second frequencies of said first and second histogram memory devices~~; a selecting device for comparing the first frequency data output from said multiplying device with the second frequency data stored in said second histogram memory device and for outputting frequency data having a smaller value; and

a compensating device for compensating the luminance level of said input luminance signal based on [[said mixed]] the outputted frequency data.

2. (currently amended) The luminance level compensating apparatus according to claim 1, wherein each of said first and second histogram memory devices detects and stores said first frequency data and second frequenc[[ies]]y data for each field period~~, and~~

~~said frequency data mixing device generates said mixed frequency data for each field period~~.

3. (canceled).

4. (currently amended) An apparatus for compensating luminance level of a signal, the apparatus comprising:

a first masking circuit for masking a first predetermined image area component of a digital video signal to output a first masked signal, wherein the first predetermined image area corresponds to at least a first plurality of scanning lines in a vertical range;

a second masking circuit for masking a second predetermined image area component, wherein the second predetermined image area component corresponds to at least a second plurality of scanning lines in the vertical range, and [[which]] wherein the second predetermined image area component is not equal to the first predetermined image area component, of the digital video signal to output a second masked signal;

a first histogram memory for storing frequency distribution data for each of a plurality of luminance levels corresponding to the first masked signal for each predetermined period;

a second histogram memory for storing frequency distribution data for each of a plurality of luminance levels corresponding to the second masked signal for each predetermined time period;

a multiplier for multiplying frequency distributed data output by the first histogram memory by a frequency data coefficient;

a minimum value selector for comparing the multiplied frequency distributed data and frequency distribution data output by the second histogram memory and for outputting smaller of the multiplied frequency distribution data and the frequency distribution data output by the second histogram memory;

an accumulator circuit for accumulating frequency distribution data output by the minimum value selector in an accumulation histogram memory; and

a compensation circuit for compensating luminance level of the digital signal based on the accumulated frequency distribution data.

5. (previously presented) The apparatus of claim 4 further comprising an analog to digital converter for receiving an analog video signal and generating the digital signal.

6. (previously presented) The apparatus of claim 5 further comprising a synchronization separation circuit for extracting a vertical synchronizing signal and a horizontal synchronizing signal from the analog video signal and for outputting the vertical synchronizing signal and the horizontal synchronizing signal to the first masking circuit and the second masking circuit.

7. (previously presented) The apparatus of claim 4, wherein said first histogram memory outputs the frequency distribution data for a first predetermined period corresponding to a horizontal scanning period of a first number of vertical detection range lines, and said second histogram memory outputs the frequency distribution data for a second predetermined period corresponding to a horizontal scanning period of a second number of vertical detection range lines which includes the first number of vertical detection range lines.

8. (previously presented) The apparatus of claim 4, wherein the compensation circuit further comprises a normalization arithmetic circuit for normalizing the accumulated frequency distribution data.

9. (previously presented) The apparatus of claim 8 further comprising a look-up table memory for storing a normalized version of the accumulated frequency distribution data.

10. (currently amended) A method for compensating luminance level of a digital signal, the method comprising:

masking a first predetermined image area component of a digital video signal to output a first masked signal using a first masking circuit, wherein the first predetermined image area component corresponds to at least a first plurality of scanning lines in a vertical range;

masking a second predetermined image area component, wherein the second predetermined image area component corresponds to at least a second plurality of scanning lines in the vertical range, and [[which]] wherein the second predetermined image area component is not equal to the first predetermined image area component of the digital video signal, to output a second masked signal using a second masking circuit;

storing frequency distribution data for each of a plurality of luminance levels corresponding to the first masked signal for each predetermined period in a first histogram memory area;

storing second frequency distribution data for each of a plurality of luminance levels corresponding to the second masked signal for each predetermined time period in a second histogram memory area;

multiplying frequency distribution data output by the first histogram memory area by a frequency data coefficient;

comparing the multiplied frequency distributed data and frequency distribution data output by the second histogram memory area;

outputting smaller of the multiplied frequency distributed data and frequency distribution data output by the second histogram memory area;

accumulating frequency distribution data in an accumulation histogram memory; and

compensating luminance level of the digital video signal based on the accumulated frequency distribution data.

11. (previously presented) The method of claim 10 further comprising receiving an analog video signal and generating the digital video signal using an analog to digital converter.

12. (previously presented) The method of claim 10 further comprising extracting a vertical synchronizing signal and a horizontal synchronizing signal from the analog video signal and outputting the vertical synchronizing signal and the horizontal synchronizing signal to the first masking circuit and the second masking circuit.

13. (previously presented) The method of claim 10, wherein the frequency distribution data in the first histogram memory area is output for a first predetermined period corresponding to a horizontal scanning period of a first number of vertical

detection range lines, and the frequency distribution data in the second histogram memory area is output for a second predetermined period corresponding to a horizontal scanning period of a second number of vertical detection range lines which includes the first number of vertical detection range lines.

14. (previously presented) The method of claim 10, further comprising normalizing the accumulated frequency distribution data.

15. (currently amended) A system for compensating luminance level of a digital signal the system comprising:

means for masking a first predetermined image area component of a digital video signal to output a first masked signal using a first masking circuit, wherein the first predetermined image area component corresponds to at least a first plurality of scanning lines in a vertical range;

means for masking a second predetermined image area component, wherein the second predetermined image area component corresponds to at least a second plurality of scanning lines in the vertical range, and [[which]] wherein the second predetermined image area component is not equal to the first predetermined image area component, of the digital video signal to output a second masked signal using a second masking circuit;

a first means for storing frequency distribution data for each of a plurality of luminance levels corresponding to the first masked signal for each predetermined period;

a second means for storing frequency distribution data for each of a plurality of luminance levels corresponding to the second masked signal for each predetermined period.

means for multiplying frequency distribution data output by the first means for storing frequency distribution data by a frequency data coefficient;

means for comparing the multiplied frequency distributed data and frequency distribution data output by the second means for storing frequency distribution data;

means for outputting smaller of the multiplied frequency distributed data and frequency distribution data output by the second means for storing frequency distribution data;

means for compensating luminance level of the digital video signal based on the accumulated frequency distribution data.

16. (previously presented) The system of claim 15 further comprising means for receiving an analog video signal and generating the digital video signal.

17. (previously presented) The apparatus of claim 15, wherein said first means outputs the frequency distribution data for a first predetermined period corresponding to a horizontal scanning period of a first number of vertical detection range lines, and said second means outputs the frequency distribution data for a second predetermined period corresponding to a horizontal scanning period of a second

number of vertical detection range lines which includes the first number of vertical detection range lines.

18. (previously presented) The system of claim 15 further comprising means for normalizing the accumulated frequency distribution data.

19. (previously presented) The system of claim 18 further comprising means for storing a normalized version of the accumulated frequency distribution data.